

REMARKS/ARGUMENTS**1.) Amendments**

The Applicants have amended claims 1 and 24 to more particularly point out and distinctly claim the subject matter the Applicants regard as the invention. Accordingly, claims 1 and 3-25 remain pending in the application. Favorable reconsideration of the application is respectfully requested in view of the foregoing amendments and the following remarks.

2.) Allowable Subject Matter

The Examiner objected to claims 4, 5 and 16 as being dependent upon a rejected base claim (claim 1), but indicated such claims would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims. The Applicants thank the Examiner for the indication of allowable subject matter. The Applicants, however, believe claim 1 to be allowable over the prior art of record and, therefore, decline to so amend claims 4, 5 or 16.

3.) Telephonic Interview

The Applicants thank the Examiner for the telephonic interview on January 14, 2004, during which the inventor, Reiner Ludwig, clarified for the Examiner many aspects of the claimed invention – particularly the claim limitations discussed hereinafter that clearly distinguish the claimed invention over United States Patent No. 5,862,452 issued to Cudak et al.

4.) Claim Rejections – 35 U.S.C. § 102(a)

The Examiner rejected claims 1, 3, 6-15 and 17-25 as being anticipated by Cudak. The Applicants traverse the rejection.

Claim 1 recites:

1. Method for improving a processing time of received data in packet oriented applications in a data transmission of data flows between a transmitter and a receiver, each transmission involving a first and a second protocol layer and being carried via a communication network, wherein said method comprises:

providing a data flow at the first protocol layer as data packets of the first protocol layer;

releasing data from the first protocol layer to the second protocol layer in the transmitter;

dividing the data of the first protocol layer into consecutive data packets of the second protocol layer by generating a sequence of data packets with sequence numbers, wherein a data packet of the second protocol layer contains data from only one data packet of the first protocol layer;

transmitting the data packets of the second protocol layer to the receiver via the communication network;

sorting received data packets of the second protocol layer at the receiver according to the sequence of the data packets;

allocating received data packets of the second protocol layer to data packets of the first protocol layer, in the second protocol layer; and

upon a data packet of the first protocol layer being completely generated from a group of data packets of the second protocol layer allocated to the first protocol layer, examining said completely generated data packet for an association to a data flow, and releasing said completely generated data packet to the first protocol layer without considering the non-delivery of prior data packets of said second protocol layer not a part of said completely generated data packet of said first protocol layer. (emphasis added)

First, Cudak describes the use of a stop and wait ARQ. Stop and wait transmission is the simplest reliability technique and is adequate for a very simple communications protocol. A stop and wait protocol transmits a data unit, or packet, of information and then waits for a response. The receiver receives each data packet and sends an acknowledgement if a data packet is received correctly, and a negative

acknowledgement if the data packet is not received. In practice, the receiver may not be able to reliably identify whether a data packet has been received, and the transmitter will usually also need to implement a timer to recover from the condition where the receiver does not respond. Under normal transmission, the sender will receive an acknowledgement for the data packet and then commence transmission of the next data packet. In contrast, the Applicants' invention does not use a stop and wait protocol, which is inherent in the limitations of claim 1, such as: "transmitting the data packets of the second protocol layer to the receiver via the communication network" and "sorting received data packets of the second protocol layer at the receiver according to the sequence of the data packets." The transmission and sorting of multiple packets implies the use of a sliding window protocol, which is not described in the system disclosed by Cudak.

Second, prior art sliding window protocols require in sequence delivery prior to releasing completed data packets to a next higher protocol layer. Applicants' invention, in contrast, as recited in claim 1, introduces a novel concept. Upon a data packet of a first protocol layer (e.g., the network, or IP, layer) being completely generated [at the receiver] from a group of data packets of the second protocol layer, the completely generated data packet is released to the first protocol layer without considering the non-delivery of prior data packets of the second protocol layer not a part of the completely generated data packet of the first protocol layer. Cudak cannot anticipate claim 1 because it does not disclose a system or method employing a sliding window protocol. Moreover, conventional sliding window protocols do not release data packets to other

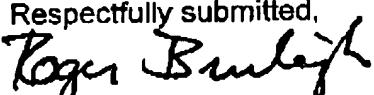
protocol layers without considering the non-delivery of prior data packets. Therefore, Cudak fails to anticipate claim 1.

Whereas claim 24 recites limitations analogous to those of claim 1, Cudak also fails to anticipate that claim. Moreover, whereas claims 3-23 and 25 are dependent from claims 1 and 24, respectively, and include the limitations of their respective base claims, those claims are also not anticipated by Cudak. The Applicants, therefore, respectfully request that the Examiner withdraw the rejection of claims 1 and 3-25 in view of Cudak.

CONCLUSION

In view of the foregoing amendments and remarks, the Applicants believe all of the claims currently pending in the Application to be in a condition for allowance. The Applicants, therefore, respectfully request that the Examiner withdraw all rejections and issue a Notice of Allowance for claims 1 and 3-25.

The Applicants request a telephonic interview if the Examiner has any questions or requires any additional information that would further or expedite the prosecution of the Application.

Respectfully submitted,

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